Notice of Allowability	Application No. 10/002,713	Applicant(s) ICHIRIU ET AL.	
	Examiner JAMES C. KERVEROS	Art Unit 2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *RCE and Amendment filed 5/27/2005*.

2. ☒ The allowed claim(s) is/are *1-22,39-49 and 62-76, Renumbered as claims 1-48* .

3. ☒ The drawings filed on *02 August 2004* are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   *.Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *20050714* .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

GUY LAMARRE
PRIMARY EXAMINER

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/27/2005 has been entered.

This is a Notice of Allowance in response to Amendment filed 5/27/2005, and telephone interview with Applicant's Attorney Charles E. Shemwell hele on 7/15/2005.

Prior Office Action Claim Status:

Claims 1-61 were pending. Claims 23-38 and 50-61 were withdrawn as a result of Election/Restriction. Claims 1-22 and 39-49 were previously examined.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Charles E. Shemwell on July 15, 2005.

The application has been amended as follows:

Amendment to the Claims:

Previously withdrawn Claims 23-38 and 50-61 are now cancelled.

New Claims 62-76 have been added, as follows:

62. (new) A method of operation within a content addressable memory (CAM) device, the method comprising:

accessing data stored at a first address value in a CAM array;

comparing the first address value with a second address value to determine if the first address value and the second address value have a predetermined relationship;

incrementally adjusting the second address value if the first address value and the second address value have the predetermined relationship; and

incrementally adjusting the first address value if the first address value and the second address value do not have the predetermined relationship.

63. (new) The method of claim 62 further comprising resetting the first address value to a start address if the first address value and the second address value have the predetermined relationship.

64. (new) The method of claim 63 wherein resetting the first address value to a start address comprises resetting the first address value to a start address that corresponds to a highest priority storage location in the CAM array.

65. (new) The method of claim 63 wherein resetting the first address value to a start

address comprises resetting the first address value to a lowest address that corresponds to a storage location within the CAM array.

66. (new) The method of claim 63 wherein resetting the first address value to a start address comprises resetting the first address value to a highest address that corresponds to a storage location within the CAM array.

67. (new) The method of claim 62 wherein incrementally adjusting the first address value comprises increasing the first address value by a predetermined amount.

68. (new) The method of claim 62 wherein incrementally adjusting the first address value comprises decreasing the first address value by a predetermined amount.

69. (new) The method of claim 62 wherein comparing the first address value with the second address value to determine if the first address value and the second address value have a predetermined relationship comprises determining if the first address value and the second address value are equal.

70. (new) The method of claim 62 wherein comparing the first address value with the second address value to determine if the first address value and second address value have a predetermined relationship comprises determining if the first address value is greater than the second address value.

71. (new) The method of claim 62 wherein incrementally adjusting the second address value comprises increasing the second address value by a predetermined amount.

72. (new) The method of claim 62 wherein incrementally adjusting the second address value comprises decreasing the second address value by a predetermined amount.

73. (new) The method of claim 62 further comprising:
receiving a reset signal; and
resetting the second address value to an initial value.

74. (new) The method of claim 73 wherein resetting the second address value to an initial value comprises resetting the second address value to an initial value that corresponds to a highest priority storage location in the CAM array.

75. (new) The method of claim 73 wherein resetting the second address value to an initial value comprises resetting the second address value to a lowest address that corresponds to a storage location within the CAM array.

76. (new) The method of claim 73 wherein resetting the second address value to an initial value comprises resetting the second address value to a highest address that corresponds to a storage location within the CAM array.

Allowable Subject Matter

Claims 1-22, 39-49 and 62-76 are allowed. Renumbered as Claims 1-48.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

Examiner Interviews:

During an interview held on 24 May 2005, Charles E. Shemwell, Attorney for Applicant, indicated that the prior art by Oh et al. (U.S. Patent 6,625,766) fails to disclose a second counter, and furthermore, it would not have been obvious to incorporate a second counter in the Oh's reference. Examiner Kerveros agreed to withdraw the Finality of the Office Action in a follow up continued examination, RCE.

Also, during a follow up inerview on July 15, 2005, Mr. Shemwell suggested to rejoint the method claims 23-38 previously withdrawn by substituting with new claims 62-76 including the allowable subject matter of "incrementally adjusting the first address value if the first address value and the second address value do not have the predetermined relationship", as recited in the independent claim 62. The Examiner agreed to implement the claims amendment using an Examiner's Amendment, as indicated above.

Upon further search, the prior arts of record taken alone or in combination fail to teach, anticipate, suggest or render obvious a second counter included in the independent claims.

Independent Claim 1 recites, inter alia, a second counter circuit to store a limit value and to incrementally adjust the limit value in response to the second control signal.

Independent Claim 39 recites, inter alia, means for incrementally adjusting the second address value if the first address value and the second address value have the predetermined relationship.

Independent Claim 44 recites, inter alia, a second counter to store a limit value, a compare circuit coupled to the first and second counters to compare the address with the limit value, and an address decoder coupled to the first counter and the CAM array to select one of the rows of CAM cells corresponding to the address.

Independent Claim 62 recites, inter alia, the method steps of incrementally adjusting the second address value if the first address value and the second address value have the predetermined relationship, and incrementally adjusting the first address value if the first address value and the second address value do not have the predetermined relationship.

Subsequently, claims 1-22, 39-49 and 62-76 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

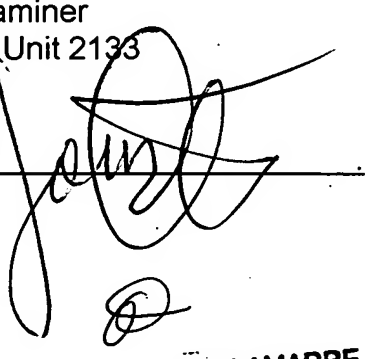
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES C. KERVEROS whose telephone number is (571) 272-3824. The examiner can normally be reached on 9:00 AM TO 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAMES C KERVEROS
Examiner
Art Unit 2133

By: 

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